# Second Professional BHMS Degree Regular Examination, September, 2024

# Pathology and Microbiology (Hom UG-Path-M) Paper -11

## (2022 Scheme)

Time: 3 Hours Total marks: 100

- Answer all questions to the point neatly and legibly. Do not leave any blank pages between answers. Indicate the question number correctly for the answer in the margin space.
- Answer all parts of a single question together. Leave sufficient space between answers.
- Draw table/diagrams/flow charts wherever necessary.

## 1. Multiple Choice Questions

 $(10 \times 1 = 10 \text{ marks})$ 

The Answers to MCQ Questions (Q.No. i to Q. No. x) shall be written continuously on the first two writing sheets ( ie Page No. 3 & 4) only.

- i) The interval between the time of entry of the pathogen into the vector and the vector becoming infective is called
  - a) Convalescent period
  - b) Prodromal period
  - c) Extrinsic incubation period
  - d) Intrinsic incubation period
- ii) Robertsons's cooked meat medium is used to culture
  - a) Aerobic bacteria
  - b) Anaerobic bacteria
  - c) Spirichetes
  - d) Yersinia pestisi
- iii) Which organism has Carom coin appearance of colonies when cultured in enriched medium
  - a) Staphylococcus aureus
  - b) Staphylococcus epidermidis
  - c) Streptococcus pyogenes
  - d) Streptococcus pneumoniae
- iv)The mode of transmission of Clostridium tetani is through
  - a) Contaminated food
  - b) Direct contact
  - c) Deep punctured wounds contaminated with soil
  - d) Contaminated inanimate objects
- v) The common clinical feature of Visceral Leishmaniasis is
  - a) Hepatosplenomegaly
  - b) Haematuria
  - c) Conjunctivitis
  - d) Cardiomegaly
- vi) The vector for Trypanosoma brucei is
  - a) Louse
  - b) Tsetse fly
  - c) Flea
  - d) Reduviid bug
- vii) Mycobacterium leprae primarily affects

- a) Gastrointestinal tract
- b) Heart
- c) Skin and peripheral nerves
- d) Genitourinary system

Viii) Which of the following is associated with cervical cancer

- a) Epstein-Barr virus
- b) Human papilloma virus
- c) Herpes simplex virus
- d) Rubeola virus
- ix) Which virus has segmented genome
  - a) Influenza
  - b) Mumps
  - c) Measles
  - d) Varicella Zoster
- X) Echinococcus granulosus causes
  - a) Larva currens
  - b) Cysticercosis
  - c) Hydatid cyst
  - d) Lymphatic obstruction

#### **Short Answer Questions**

(8x5=40 marks)

- 2. Classify Bacteria based on shape. Describe the types of flagellar arrangement in a bacterial cell.(3+2)
- 3. Describe the sources of Infection.
- 4. Explain the pathogenecity of Bacillus anthracis.
- 5. Describe the pathogenesis of Primary Tuberculosis
- 6. Explain the morphology of Bacteriophage.
- 7. Describe the clinical manifestations of Syphilis.
- 8. State five differences between Classical and Occult Filariasis.
- 9. Describe the morphology of Entamoeba histolytica.

### **Long Answer Questions**

(5x10=50 marks)

- 10. Explain the morphology, pathogenesis and clinical features of of Vibrio cholera.
- 11. Discuss the clinical manifestations and complications of Chicken-pox. (5+5)
- 12. Explain the pathogenecity and clinical features of Ancylostoma duodenale. (5+5)
- 13. Explain the life cycle of Plasmodium species. Describe the clinicl features of Malaria.(7+3)
- 14. A five year old child was brought to the OPD with a history of sore throat and difficulty in swallowing since past three days. He had low grade fever and enlarged cervical lymph nodes. His tonsillar pillars were covered with a greyish- white membrane with a well defined edge
- a) What is the most probable diagnosis? (1)

- b) Describe the clinical features of this condition (4)
- c) List the complications of this condition.(5)

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